UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,829	02/05/2004	Robert S. Cooper	114.0005	6010

27997   7590   06/08/2009
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EXAMINER
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ART UNIT	PAPER NUMBER
2626	

MAIL DATE	DELIVERY MODE
06/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<table>
<tr><td rowspan="3">Office Action Summary</td><td>Application No.
10/772,829</td><td>Applicant(s)
COOPER ET AL.</td></tr>
<tr><td>Examiner
David Kovacek</td><td>Art Unit
2626</td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12 February 2009</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-16</u> is/are pending in the application.
    4a) Of the above claim(s) <u>2</u> is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1, 3-16</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

02/12/2009 has been entered.

2.   This Office Action is response to applicant's Amendment, filed 02/12/2009, in

which the applicant amends **claims 1**, **3-7**, **11** and **13**, cancels **claim 2**, and provides

arguments for patentability of the claims over the previously cited prior art.

Response to Amendment

3.   The applicant's amendments to **claims 1**, **6-7**, **11** and **13** have been considered

and are accepted. It is noted by the examiner that the current amendments

substantially change the scope of the limitations of the claims as previously presented.

It is further noted by the examiner that the substantial changes in scope in **claims 1** and

11 comprise limitations previously in now-cancelled **claim 2**. It is noted by the examiner

that formal acceptance of the conditions of the claims is not an indication of allowability

of the claims over the prior art. Appropriate rejections are included in this Office Action

in the relevant sections below.

4.   The applicant's amendments to **claims 3** with respect to formal conditions of the

claim have been considered and are accepted. It is noted by the examiner that formal

acceptance of the conditions of the claims is not an indication of allowability of the

claims over the prior art. Appropriate rejections are included in this Office Action in the

relevant sections below.

5.   The applicant's cancellation of **claim 2** is accepted.

Response to Arguments

6.   Applicant's arguments with respect to **claims 1**, **11** and all claims dependent on

the same have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

7.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

8.   **Claims 1** and **3-16** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Cohen (US Patent 6,560,576; cited previously), in view of US Patent

6,748,361hereinafter referred to as Comerford.

Regarding **claim 1**, Cohen discloses a voice [speech] recognition system

comprising:

- a plurality of modules for receiving voice inputs from
a user and performing services in response (Fig. 1, item 2; Fig. 2; Col. 4,
lines 13-15; Col. 4, lines 31-32; Col. 4, lines 53-57),

- each module including at least one function [at least one
voice-enabled application] and at least one module including multiple
functions [applications may be designed to manage investments, wherein such
management would comprise multiple functional capabilities] (Col. 4, lines 18-19; Col. 4,
lines 25-29);

- a user information database [usage history] storing user
records including a function usage fully indicating

the number of times the user has successfully
performed the function [number of times the user has used the
browser to request any type of content] (Col. 8, lines 11-15, 22-23, 52-53,
60)

- a prompt selection module [voice browser] for selecting a
prompt for presentation to a user (Col. 3, lines 26-31; Fig. 4; Fig. 5),

- the module being operative to identify both an overall
experience level of a user with the system [number of session a given
user has had with the voice browser] (Col. 8, lines 11-15, 22-23, 60) and an
experience level with the function [number of times the user has used the
browser to request any type of content during the session] (Col. 8, lines 11-15, 52-53)
and select a prompt appropriate to the user's experience level
(Col. 5, lines 48-55).

Comerford additionally teaches:

- a user information database [dialogue management user data]
storing user records including a function usage tally indicating
the number of times the user has successfully performed each
function [data for total dictation activity] (Fig. 16, elements 160004, 16006, 16022;
Col. 22, lines 54-57); and

- a prompt selection module for obtaining module,
function and function usage tally information for a current
function being used by a user selecting a prompt for

presentation to the user [choosing novice, intermediate, or expert prompt] (Fig. 16, elements 16008-16020; Col. 22, lines 37-53),

- a prompt being a message from the system to the user calling for a user input appropriate to the function being performed [guidance which matches the amount of experience they have with a given feature and time since they used that feature] (Col. 21, line 66 – Col. 22, line 04; Col. 22, lines 37-47),

- the prompt selection module identifying both an overall experience level of the user with the system [time since a user last used a feature] and an experience level with the current function being used [the amount of experience a user has with a given feature] and selecting a prompt appropriate to the user's experience level with the current function [expert, intermediate, or novice prompt] (Fig. 16, elements 16006, 16008, 16022; Col. 21, lines 63-65; Col. 2, lines 26-31; Col. 22, lines 37-40),

- selection of prompts tending to favor the presentation of more abbreviated prompts to users with greater experience levels with the current function [prompts are graded in terms of the detail the contain] (Fig. 16, element 16012; Col. 21, lines 53-65; Col. 21, line 66 – Col. 22, line 04).

The references are combinable because each is directed to an apparatus for dialogue management featuring prompt selection based upon user experience.

Comerford further provides motivation to combine the references in making the

conversational behavior of the system readily modified in order to adhere to the

preferences or limitations of the user (Abstract; Col. 2, lines 56-61).

Therefore, the examiner contends that it would have been obvious to one of

ordinary skill in the art at the time the invention was made to combine the teachings of

Cohen with the teachings of Comerford in order to implement an apparatus for dialogue

management featuring prompt selection that further was operable to readily modify the

conversational behavior of the system in order to adhere to the preferences or

limitations of the user.

Regarding **claim 3**, Cohen in view of Comerford teaches all limitations of **claim 1**

as applied above, and Cohen further discloses a module incorporating a prompt

selection module to select prompts for that module (Col. 5, lines 63-67; Col. 6, lines 1-5;

Col. 6, lines 7-10; Col. 6, lines 33-37).

It is noted by the examiner that Cohen only discloses a module in the context of

the embodiment of a voice browser. It is additionally noted by the examiner that though

Cohen does not explicitly state the existence of a prompt selection module, the

disclosure of prompt selection inherently requires some implementation to achieve this.

It is further noted that any such implementation would be considered synonymous with

the broadest reasonable interpretation of a "prompt selection module" by one of ordinary

skill in the art.

Regarding **claim 4**, Cohen in view of Comerford teaches all limitations of **claim 3** as applied above, and Cohen further discloses prompt selection for each module identifies the function for which prompting is needed and selects from among prompts associated with that function (Col. 5, lines 63-67; Col. 6, lines 1-5).

It is noted by the examiner that this is inherently required of any implementation that is operable to determine a user's first use of a feature as disclosed by Cohen.

Regarding **claim 5**, Cohen in view of Comerford teaches all limitations of **claim 4** as applied above, and Cohen further discloses user information indicating the user's proficiency in using the system (Col. 5, lines 49-55).

Comerford additionally discloses tracking the user's overall proficiency with a system [updating total activity record] (Fig. 16, element 16022; Col. 22, lines 54-57). This disclosure is directly related to the disclosure of Comerford applied above to parent **claim 4**, and therefore the motivation to combine the references is the same for **claim 5** as applied above to **claim 4**.

It is noted by the examiner that this limitation is inherently required of any system that is operable to distinguish the user as being of "novice" or "expert" skill level as disclosed by Cohen or Comerford.

Regarding **claim 6**, Cohen in view of Comerford teaches all limitations of **claim 5** as applied above, and Cohen further discloses a user's proficiency takes into account

both the user's successful and unsuccessful attempts with a current function [usage

history of all dialog states] (Col. 5, lines 49-55; Col. 8, lines 11-15).

It is noted by the examiner that this limitation is inherently required of any system

that is operable to distinguish the user as being of "novice" or "expert" skill level with

regard to a particular function as disclosed by Cohen.

Regarding **claim 7**, Cohen in view of Comerford teaches all limitations of **claim 6**

as applied above, and Cohen further discloses information indicating a function usage

tally for each function indicating a number of times the user has unsuccessfully

employed the function [usage history of all dialog states] (Col. 5, lines 63-67; Col. 6,

lines 1-10; Col. 6, lines 33-37; Col. 8, lines 11-15; Col. 8, lines 22-23; Col. 8, lines 53-

64).

It is noted by the examiner that "dialog state", as determined in Cohen, is

understood to be an exchange of data between the user and an active module. This will

be the definition of "dialog state" applied throughout the remainder of this document.

It is further noted by the examiner that Cohen's disclosure of a "usage history

that tracks the dialog states of the user" (Col. 8, lines 12-13) would be understood by

one of ordinary skill in the art to include data regarding each of the functions used,

including successful usage, and errors generated during normal operation.

Regarding **claim 8**, Cohen in view of Comerford teaches all limitations of **claim 7** as applied above, and Cohen further discloses the prompt selection being used employs the function usage tally for a function to determine a user experience category for the user with respect to that function (Col. 5, lines 50-51; Col. 5, lines 63-65; Col. 8, lines 22-23; Col. 8, lines 11-15).

It is noted by the examiner that this is explicitly disclosed in Cohen by regarding any user with a functional usage tally indicating less than one use of a given function to belong to the "novice" experience category.

Regarding **claim 9**, this claim is very similar to **claim 8** and is rejected for the same reasons.

Regarding **claim 10**, Cohen in view of Comerford teaches all limitations of **claim 9** as applied above, Cohen and additionally discloses the prompt selection selects a prompt associated with the user experience category (Col. 5, lines 50-55).

Regarding **claim 11**, this claim is very similar to **claim 1** and is rejected for the same reasons. **Claim 1** corresponds to **claim 11** since they are related as the apparatus and method of using the apparatus, and hence are rejected for the same reasons as given above.

Regarding **claim 12**, Cohen in view of Comerford teaches all limitations of **claim 11** as applied above, and Cohen further discloses the step of identifying the user experience level is followed by a step of identifying the user as belonging to a particular experience category and the step of selecting a prompt includes selecting a prompt associated with the experience category to which the user belongs (Fig. 4; Fig. 5; Col. 5, lines 50-55; Col. 8, lines 65-66; Col. 9, lines 22-23).

It is noted by the examiner that this limitation is inherent in the disclosure of Cohen as illustrated for **claims 5**, **6**, and **8** above.

Regarding **claim 13**, Cohen in view of Comerford teaches all limitations of **claim 12** as applied above, and Cohen further discloses the identifying the user experience category for a function includes examining user information for that function retrieved from a voice information database [usage history] (Col. 8, lines 11-15; Col. 8, lines 65-66; Col. 9, lines 22-23), the user experience information for the function includes a function usage tally indicating a number of times the function has been unsuccessfully invoked by the user [usage history tracking dialog states] (Col. 5, lines 49-51; Col. 8, lines 11-15; Col. 8, lines 52-53).

Regarding **claim 14**, Cohen in view of Comerford teaches all limitations of **claim 13** as applied above, and Cohen further discloses that identifying the user experience category for a function includes assigning the user to an experience category

associated with a range of unction usage tally values within which the user's function

usage tally for the function falls (Col. 5, lines 49-55).

Comerford additionally teaches this limitation in disclosing a prompt decision

between an expert, intermediate, and novice prompt selection (Col. 22, lines 26-31,

lines 37-53).

It is noted by the examiner that this limitation is inherent to the disclosure of

Cohen in view of Comerford as illustrated for **claims 8** and **9** above.

Regarding **claim 15**, Cohen in view of Comerford teaches all limitations of **claim

14** as applied above, and Cohen further discloses updating the user information for

each function whenever the user successfully invokes the function (Col. 8, lines 11-15;

Col. 8, lines 52-53).

It is noted by the examiner that one of ordinary skill of the art would consider

"usage history" as disclosed by Cohen to be updated upon any changes in relevant

data, including the successful usage of a function by the user.

Comerford additionally discloses this limitation (Col. 22, lines 54-57), wherein

such teachings are directly related to the disclosure of Comerford as applied to **claim

11** above. Therefore, the motivation to combine the references is the same for **claim 15**

as applied above to **claim 11**.

Regarding **claim 16**, this claim is very similar to **claim 15** and is rejected for the

same reasons.

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

- Strickland (US Patent 5,956,024) teaches a graphical user interface for

     customer service that includes consideration of experience level of the

     operator.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to David Kovacek whose telephone number is (571)270-

3135. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R Hudspeth/
Supervisory Patent Examiner, Art Unit 2626

DMK, 06/03/2009